

APPLICANT(S): DAVIDSON, Tal et al.

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AMENDMENTS TO THE CLAIMS

Please amend claims 1, 7, 8, 19 and 21.

Please cancel claims 13, 14-18, 26 and 27.

Please add new claims 33 and 34.

This listing of claims below will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for capturing in-vivo images, the method comprising:

capturing an in-vivo image using an autonomous in vivo device, said device comprising a housing containing an imager, an optical system, a detector, an illumination device, a processor and a transmitter, wherein said image is captured with a distortion effect;
digitally overlaying a non-linear scale on the in-vivo image in accordance with said distortion effect in order to enable a viewer to estimate the size of an object within the image; and
calculating a size of an object within the image, wherein said calculation is based on illumination intensity of said illumination device.
2. (Original) The method of claim 1, comprising displaying the image.
3. (Original) The method of claim 1, wherein the step of overlaying the scale is performed at a processing device external to an in-vivo device.
4. (Original) The method of claim 1, wherein the steps of overlaying the scale and capturing the images are performed at an in-vivo device.
5. (Original) The method of claim 1, wherein the scale comprises a set of lines.

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6. (Original) The method of claim 1, comprising providing a size estimate of an object contained in an image.
7. (Currently Amended) The method of claim 1, wherein said image is captured with a distortion effect is caused by said optical system.
8. (Currently Amended) The method of claim 1, comprising wherein said step of digitally overlaying a non-linear scale on the in-vivo image comprises compensating for said distortion effect.
9. (Original) The method of claim 1, comprising estimating a distance between an in-vivo imaging device and an object in said in-vivo image.
10. (Original) The method of claim 1, comprising receiving a first point in said in-vivo image and a second point in said in-vivo image.
11. (Original) The method of claim 10, comprising calculating a distance between said first point and said second point.
12. (Original) The method of claim 10, comprising comparing an object in the image to the scale.
13. (Canceled)
14. (Canceled)
15. (Canceled)
16. (Canceled)
17. (Canceled)

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18. (Canceled)

19. (Currently Amended) An autonomous in-vivo imaging device comprising:

an imager;

an optical system;

a detector;

a transmitter;

an illumination device; and

a circuit to add digitally overlay a non-linear scale to onto images collected by the imager, wherein said images are captured with a distortion effect and said scale is digitally overlaid in accordance with said distortion effect and to enable a viewer to calculate a size of an object within an image, wherein said calculation is based on illumination intensity of said illumination device.

20. (Canceled)

21. (Currently Amended) A system comprising:

an autonomous in-vivo device, said device comprising a housing containing an imager, an optical system, a detector, an illumination device and a transmitter; and

a controller to:

receive an image from said in-vivo device, wherein said image is captured with a distortion effect;

add digitally overlay a non-linear scale to onto the image in accordance with said distortion effect to enable a viewer to calculate a size of an object within the image; and

calculate a size of an object within the image, wherein said calculation is performed based on illumination intensity of said illumination device.

22. (Original) The system of claim 21, wherein the controller is to calculate an estimated size of objects in the image.

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23. (Original) The system of claim 21, wherein the controller is to compare an object in the image to the scale.

24. (Original) The system of claim 21, wherein the controller is to receive a first point in an in-vivo image and a second point in said in-vivo image, and estimate a distance between the first point and the second point.

25. (Original) The system of claim 21, wherein the controller is to estimate a distance between the in-vivo imaging device and an object in said image.

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Previously Presented) The method of claim 1, wherein said calculation is further based on a reflection coefficient of the object.

30. (Previously Presented) The method of claim 1, further comprising:
measuring a reflected illumination intensity of the object; and
correlating the reflected illumination intensity to a distance of the object
from the device.

31. (Previously Presented) The method of claim 30, wherein the distance to the object is inversely proportional to its reflection coefficient.

32. (Previously Presented) The method of claim 1, wherein said calculation is further based on a transparency of GI fluids.

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33. (New) The method according to claim 1 further comprising refining the size calculation of the object based on a correlation between the intensity of reflected illumination and the distance of the object from the in vivo device.
34. (New) The method according to claim 33 further comprising determining the distance of the object from the in vivo device based upon an inverse relationship to a reflection coefficient of the object.